

The Content Design and Types of Learning Method of an E-Learning System for Higher Education Development

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Abstract

In the developing countries, people can study lectures by using different learning methods to improve their education. Among them, online learning and e-learning is the modernized and popular learning methods. This research presented the content design and types of learning method of an e-learning system developed. The e-learning system is designed power point slides with principles of message design (text design, graphic design, color design) by instruction designer (ID), these developed course with special designs are uploaded on web using HTML, CSS, PHP, Ajax, and MySQL by multimedia developer (MD), these developed course with slides are presented by subject matter expert (SME) with the help of Studio Engineer (SE) and then these are edited by Studio Engineer. To ensure proper interaction between students and lecturers, this proposed system incorporates audio calls to lecturers and also video conferencing software that enables lecturers deliver lecture. It can give the ability to give, receive, and discuss information in real time. This paper described the impact of the e-learning process for higher education development and why it is so important. The objective of this system is an attempt to simplify the analysis and design of e-learning courses by applying participants and their roles. It contained the analysis, design, development and testing stages of e-courses system as well as the scientific content.

Keywords

Impact, Important, E-learning, Higher Education, Instruction Designer, Multimedia Developer

1. Introduction

Some of the most significant developments in education have occurred since the Internet. In the age of knowledge, students are expected to use smartphones, tablets, and tablets. Being able to send text messages and access to the Internet is a simple matter because of the ability to send text messages and access the Internet E-learning is a computer-based educational tool that enables people to learn anywhere and anytime. Today, e-learning is mostly sent over the internet. E-learning offers a wide range of video, video and video resources. Slides offer the ability to share in a variety of formats, such as documents and PDFs. E-learning gives students the ability to fit into their lifestyle. Even the busiest people get new studies and new skills. Social networking and other means of communication allow students to contribute to the nature of the course and to discuss issues in the community. The development process of educational systems can be defined as a description of the teaching process that takes place in a special learning unit

(e.g., courses, lessons or any in which a learning design occurs). The development process in this approach is to identify the current environment and learners' needs, then determine the goal of education, and then make some adjustments to assist in the transition process [1].

2. Types of Learning Method

There are mainly four different types of learning methods. These are described as followed:

2.1 Traditional Learning

Traditional classes are for children, suitable for adolescents and adolescents who have not yet joined the workforce. Regular training allows for more interaction with others of their age. For better terms, follow a regular schedule. Classroom learning helps students and teachers get to know one another. It allows teachers to know students and better assess their strengths and weaknesses; Students are allowed to act as mentors and to guide their career path [2].

2.2 Online and Blended Learning

Blended learning is an approach to education that integrates online educational materials with traditional classroom-based methods and online opportunities. The teacher and student have a physical connection to some of the student's control of the path or momentum. While the students were attending the brick and mortar school with the teacher, the students were invited to attend. The face-to-face classroom exercise involves delivering content. Integrated with Computer-Mediated Actions. Blended learning is also used in professional development and training settings. Due to overcrowding it is difficult to reach the rest of the world. Some reports have said that the lack of consensus on the definition of blended learning has made research into its effectiveness difficult. All studies based on these evidence have concluded that student achievement is higher in blended learning experiences.

2.3 Flipped Learning

One of the most popular learning styles in the modern classroom is re-teaching. It provides students with more effective learning by using small groups and individual time classes. Then the teachers will give students the tools to preach and present the material at home or at home. Active learning is a priority for the classroom.

2.4 Mobile Learning

Mobile learning, also known as mLearning, provides personalized learning tools and tools. Defines learning needs and capabilities through social media and content such as virtual media, smartphones for mLearning, tablets contains laptops and digital notebooks. It focuses on students' freedom of movement and their interaction with technology.

3. Key Participants and Their Roles

There must have people or development team groups to develop the process of e-learning course. These participants are divided into three parts as: mandatory roles, optional roles and communications [3].

3.1 Mandatory Roles

3.1.1 Project Manager (PM)

Project manager (PM) is people who plan the process with time, team members, budget and length. PM checks frequently the process situation according to development plan.

3.1.2 Subject Matter Expert (SME)

SME is careful the expert on the topics deliberated in the course and should know that this is good sub topics are same slides in main topic as possible. SME will meet frequently, during the early stages of the course development, with the Instructional Designer, Developer, and Stakeholder.

3.1.3 Instructional Designer (ID)

ID is one who mainly interacts with the SME and must know needed analysis and design of the applied course. ID creates the course storyboard, develops contents and creates the message design, graphs, diagrams, animation and visual things for the course. And then ID joins to work with MD.

3.1.4 Multimedia Developer (MD)

MD is web developer who structures the webpage based on the graphic design. Developer uses Adobe Captivate to create images, animations and images. Text, uses text and other assets, in addition, the developer has limited time for voice and animation activity. It is responsible for providing communication and publishing in an appropriate format for the teaching method. There are various writing tools for development. Adobe Captivate is the most complete and sophisticated.

3.1.5 Graphics Designer

This section of the graphic illustrates graphic or graphic creation (or editing) during the course of the development, and this section should hopefully meet with other development teams occasionally.

3.1.6 Management Stakeholder

This is usually the responsibility of the budget allocated to the project, including some or all of the staff involved in the development team. This person may occasionally meet with a person in the group. However, their main correspondence is with the project manager.

3.1.7 Administrator

This section includes project management (goals, budgets and teams). The administrator also monitors the project schedule and controls the budget. Report conventions is from the project meetings and management.

3.1.8 Learning Management System (LMS) Expert

Most eLearning projects will be sent through LMS. Trainees also have the responsibility to attend the training without difficulty, in conjunction with the appropriate curriculum and by providing appropriate training or training to the intended users.

3.1.9 IT Partner

This part is to be provided by the administrator or singular of the network or computer of the Development and Operation Team. The IT trainer also mentors any technical issues that may arise during the training. This chapter will decide on the distribution method and the intended audience and the amount of time needed for this role.

3.1.10 “Content” Reviewers

These are a group of reviewers who understand the content and review it for the accuracy of the content development process. Small and medium businesses may be confirmed for integrity of one or more published articles and content. This team will appraisal the lesson and deliver feedback on the lesson’s correctness and wholeness. They may contain at least one review.

3.1.11 “Course” Reviewers

These collections of reviewers do not comprehend the current content but own the information needed to attend the intended training. They are good applicants to appraisal the course as a possible learner. This collection will review the training and provide feedback on how they receive the content from a potential learner. In response type, how well you understand the content flow Include any suggestions that will help them better understand their intended content. They may be involved in at least one review process and possibly.

3.2 Optional Roles

3.2.1 Video Editor

This section is not responsible for the final product of any video used in the training. This may include making a new video or using a previous one.

3.2.2 Flash Developer

Adobe is not responsible for any of the latest products of Adobe Flash used in the training. This may include creating new animations or using existing cartoon characters. It does not include cartoons created in PowerPoint or Captivate.

3.2.3 Narrator

This section is an audio recording for the course when using the audio story. The storytellers were not complicated in the creation until the first type of the course was reviewed.

3.2.4 Consultant

This is used when the content is required by a specialist. This is a major contributor to the development of script

and story boards.

3.2.5 Communications

Outgoing Communication Management. It contains the training announcements, courses and training materials. This is an ongoing part of the training life (Figure 1).

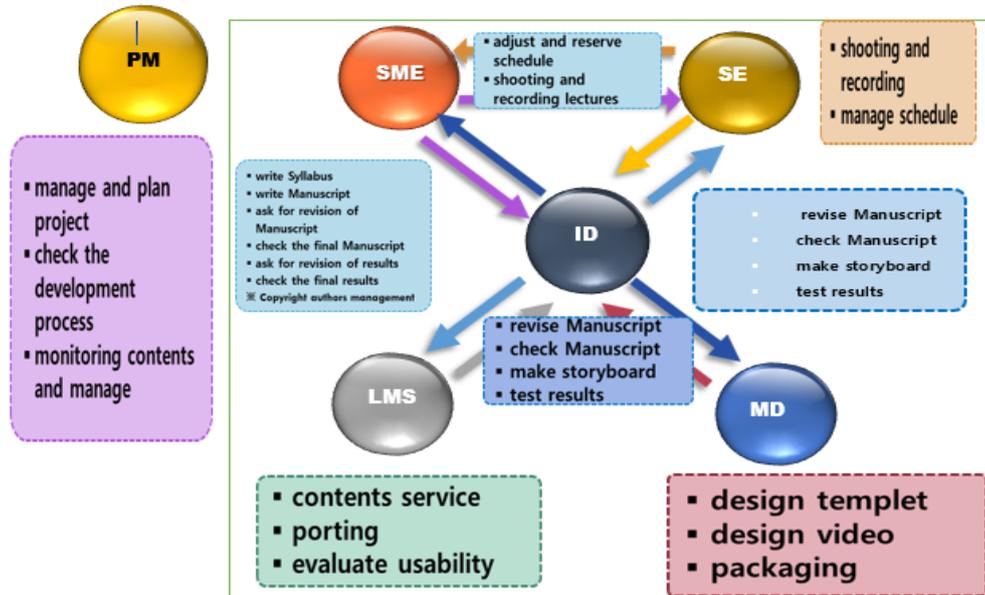


Figure 1. The communication role of proposed system.

4. E-Learning Development Process

There are 6 common phases that any eLearning improvement process must undergo. These phases are:

1. Formation of the Instructional Design Document (IDD).
2. Scripting.
3. Improvement of a prototype.
4. Improvement of the course without audio.
5. Improvement of the course with audio.
6. Creation of the Learning Management System version of the course.

Phase 1: Formation of the Instructional Design Document (IDD)

IDD is a comprehensive curriculum approach to the course. Shareholders and the Instructional Design Group sign up on the Global Learning Approach—some common approach solutions, avatars and situations. Content of the course also decided how to separate modules and screens. If multiple courses are created and each class is shaped using a dissimilar Instructional Design strategy, it must be specified in the IDD. The training and vision is completed at this stage [4-6].

Phase 2: Scripting

The material that will be used for each course is broadly concise, and each module within a module is determined on the content for the screen. Interactive connections for each module, valuations; actions and capitals are confirmed. The writing is well finished. Although a PowerPoint presentation works, document scripting is often a Word document.

Phase 3: Improvement of a Prototype

This represents the entire course for a few slides. The content and audio script on the screen was created and finalized. Selecting the key prototype that will be used in the training and create a prototype that works. The content displayed on the screen (activity/evaluation). Decisions have been made on comics and other resources. Writing at

this stage and write and edit. The prototype should work in the Learning Management System.

Phase 4: Improvement of the sequence Without Audio

At this stage, a full-blown voice training course is provided to stakeholders for their authorization. At this stage, stakeholders will be able to contribute content, content, and content. Story Animations, etc., it is expensive to create a sound and repeat it. Therefore, the audio file is not created until it is complete.

Phase 5: Improvement of the Sequence with Audio

Once the audio script is finished, a fully operational teaching sequence with acoustic is directed to shareholders. When the sound develops, it is compatible with cartoons and text on the screen. Voice quality and pronunciation are important. It needs to be checked for accuracy.

Phase 6: Creation of the Learning Management System Version

This phase of the eLearning development process is by nature the most creative. This final step is the technical and more technical part of the eLearning course. Once the shareholders have signed up to the course, the host will be hosted on the platform and will be ready to go “directly”. This is occupied upkeep of by the practical group. One reason eLearning organizations are following these steps is for the benefit of the stakeholders. Stakeholders are involved in every step of the eLearning course.

The eLearning progress group will not advance to the following level until the shareholders have confirmed the previous step. As a result, there are a number of interruptions that need to be taken. There can be much less frustration and contentment. For the reason that at the finale of the day, the shareholders have found their way to their satisfaction. And training helps learners to learn.

5. Potential Challenges of E-Learning

5.1 Advantages of E-Learning

- Cost effective. Corporations are less cost effective when replacing coach-based training with e-learning. In fact, it is not uncommon to look at cost savings anywhere. Reducing travel and material costs is a high cost, but not all. Using e-learning, trainers can use the training again and again. This means that they can emphasis their efforts on creating new training courses. Employees have less time to travel because they have less time to really focus on work.
- Faster delivery. Organizing training courses can be time consuming and expensive. Especially if your employees are spread across the country or around the world. Employees receive e-learning training when needed. And your employees learn more new skills. They learn. Your organization will soon reap its benefits and increase access. The world is touching earlier than always. Workers imagine their preparation to be as mobile as they are. Lessons from the Responding Training Development app can be used anywhere, anywhere. It is very easy to create access courses for any device.
- Personal training experience. One of the most difficult things about face-to-face learning is that teachers adapt courses for students from different backgrounds. With e-learning, learners can grow at their own pace. Developers can make learners more personalized by building different learning paths.
- Eco-friendly. Reducing travel means reducing CO₂ emissions. This is something that teachers and their students can feel good about.

5.2 Challenges

As with other training solutions, e-learning has possible challenges. Though, if you notice them, you can evade them.

- Some people say that workers are too eager to get something from an online training. We would contend that the similar is factual for In-class teaching, does not mean that you are learning, just because you are in the room. As e-learning educators, our job is to attract our students to focus their attention and absorb information.
- Low face-to-face communication. One article people concern about e-learning is separation. Did participants learn from the discussion with their peers? What questions will students ask? There are many techniques to counter this possible for separation. For sample, reopening the social landscape of online teaching through conversation panels or prompt messaging.

- Access to technology. According to the definition, e-learning requires training using a variety of techniques and training. If they do not have the necessary internet or internet linking, they will not be able to join the training. The greatest way to evade this kind of disease is to develop a learning background before improvement.

6. Evaluation

E-learning course assessment permits to evaluate the effectiveness of e-learning deliverable and to save refining it in order to deal beginners a great and remarkable eLearning knowledge. Evaluation is essential for e-learning content development process to achieve the good quality result. Evaluators should assess SME performance, test whether ID's created slides with graphic design match current course, cost reduction. Including technical and support services, quality design and monitoring. Evaluation of training design and instructions, in evaluation, four levels should be tested. They are reaction (Did learners like the training course and complete it?), learning (What could learners apply and how much is job performance improved?), Performing (What skills and knowledge did learners acquire?) and result (How well did the organization meet its business goals?).

7. Conclusion

E-learning broad casting effectively develops student attainment in learning. The aim of this study is to develop and design efficient E-learning process with particular course. E-learning manages to produce attention in students to study particular course material. Students reflect E-learning is stimulating besides applied. Media progressive more professionally, effectively helps learners more rapidly comprehend the education resources happening a shorter time. The design, contents, and collaboration and communication of the participants in development of E-learning succeed in refining student learning results.

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